

June 10, 2013

Ms. Alison Hess, P.G., Standard Chlorine Chemical Co. RPM
U.S. Environmental Protection Agency, Region 2
Special Projects Branch
Emergency and Remedial Response Division
290 Broadway, 19th Floor
New York, New York 10007-1866

**Re: Remedial Investigation/Focused Feasibility Study Work Plan Addendum
Standard Chlorine Chemical Co., Inc. Site
Kearny, Hudson County, New Jersey**

Dear Ms. Hess:

On behalf of the SCCC Site Performing Parties Group Members (consisting of Beazer East, Inc.; Cooper Industries, LLC.; Occidental Chemical Corporation; and Apogent Transition Corp.), please accept this letter and its attachments as an addendum to the April 8, 2013 Remedial Investigation/Focused Feasibility Study (RI/FFS) Work Plan (Work Plan) for the Standard Chlorine Chemical Co. Inc. Site (Site) located in Kearny, New Jersey. This addendum was prepared to address comments on the Work Plan prepared by The Isosceles Group (Isosceles) on behalf of Apogent Transition Corp. (Apogent). Key Environmental, Inc. (KEY) and Isosceles have collaborated on the preparation of this addendum; thus, Apogent and the other Performing Parties Group Members concur with the Work Plan modifications proposed herein.

The Work Plan modifications involve the addition of three soil borings and the relocation of some boring locations. The proposed boring locations are shown on the revised Work Plan Figure 5-1, included in Attachment A. The rationale for the three additional borings is as follows:

- Proposed Boring D-20 – To investigate the area between the closed vault on Lot 51 and dense non-aqueous phase liquid (DNAPL) recovery well DRWL-9 where significant quantities of DNAPL have been recovered;
- Proposed Boring D-26 – To investigate the area on the Seaboard Site between the former lagoons and DRWL-11 where the greatest volume of DNAPL has been recovered.
- Proposed Boring D-27 – To investigate the possible presence of DNAPL in the area south of recovery DRWL-11 on the Seaboard Site where existing geologic information suggests that a low spot in the upper surface of the varved clay confining unit may exist.

Some of the borings have been relocated to investigate the following areas:

- Proposed Boring D-14 - The septic tank south of Building 5 on Lot 48;



- Proposed Borings D-15 and D-16 – The former tank farm area west of Building No. 2;
- Proposed Boring D-19 – The former drainage ditch in the center of the Site;
- Proposed Boring VC-2 – The septic tank to the east of Building 4;
- Proposed Borings VC-4 and VC-5 – The area just west of the lagoon area and former process area, respectively.

The proposed soil analytical program has been updated accordingly and is summarized in modified Work Plan Table 5-1 which is included as Attachment B. All borings on the SCCC Site will have surface soil and subsurface soil samples collected for laboratory analysis. Only subsurface soil samples will be submitted for laboratory analysis from the borings on the Seaboard Site. Fill material has recently been placed on the western portion of the Seaboard Site so it is highly improbable that impacts to surficial materials from the SCCC Site could exist. Therefore, field screening will be conducted to confirm the lack of impact to surficial material on the Seaboard Site.

As originally proposed, all soil borings will be advanced to collect continuous soil samples at each location from the ground surface into the underlying varved clay. All soil samples will be visually inspected by a field geologist for visual and olfactory evidence of contamination (e.g., staining, presence of separate phase liquids, odor), subject to field screening for VOCs, classified and logged. Selection of soil samples for laboratory analysis is proposed based on the following rationale:

- If no impact is observed from ground surface to the base of the boring then a sample of the deep sand unit from the interval directly above the varved clay unit and a sample of the upper portion of the varved clay will be submitted for analysis.
- If evidence of DNAPL is observed in the deep sand unit, then a sample from the impacted interval within the deep sand unit and a sample of the upper portion of the varved clay will be submitted for analysis.
- If evidence of DNAPL is observed in the shallow zone above the deep sand unit, a sample from the impacted zone will be collected in addition to the deep sand and varved clay samples described above.

With respect to the analytical parameters, the proposal in the RI/FFS Work Plan was to analyze subsurface soils for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals and hexavalent chromium. The Performing Parties Group Members have added the analysis of polychlorinated biphenyls (PCBs) and dioxins/furans (PCDD/PCDF) for any subsurface samples where field observations indicate the potential presence of DNAPL as a finding of PCBs or PCDD/PCDFs will provide useful information for waste characterization and disposal purposes.

The inclusion of the analyses of TAL metals in subsurface samples collected from the DNAPL delineation borings is an artifact of a previous version of an RI Work Plan that was prepared prior to completion of the Interim Response Action (IRA) and where soil borings were intended to serve multiple purposes. Given that a substantial amount of analytical data for inorganic constituents was obtained as part of the IRA pre-design studies, the inorganic constituents are not DNAPL-related constituents and the SCCC Site is fully contained within a barrier wall system, the Performing Parties Group Members believe that analysis of subsurface soil samples from the DNAPL delineation borings for inorganic constituents is no longer warranted and proposes to remove these analyses from the RI scope of work.

The Performing Parties Group Members appreciate the opportunity to submit this addendum to the U.S. Environmental Protection Agency (EPA). Once EPA issues comments on the Work Plan and approves the addendum, the RI/FFS Work Plan will be revised to address EPA comments and incorporate the approved modifications. A revised Work Plan, including an updated Quality Assurance Project Plan (QAPP) and updated Health and Safety Plan (HSP), will be submitted to EPA for final approval within 30-days of receipt of EPA comments.

Please feel free to contact me with any questions or comments.

Sincerely,

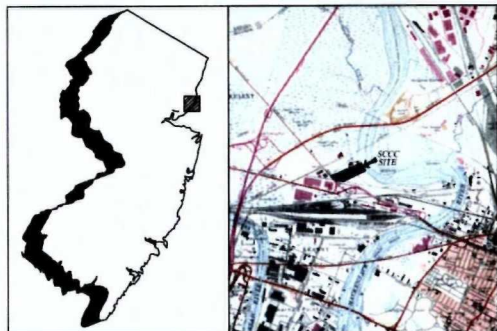
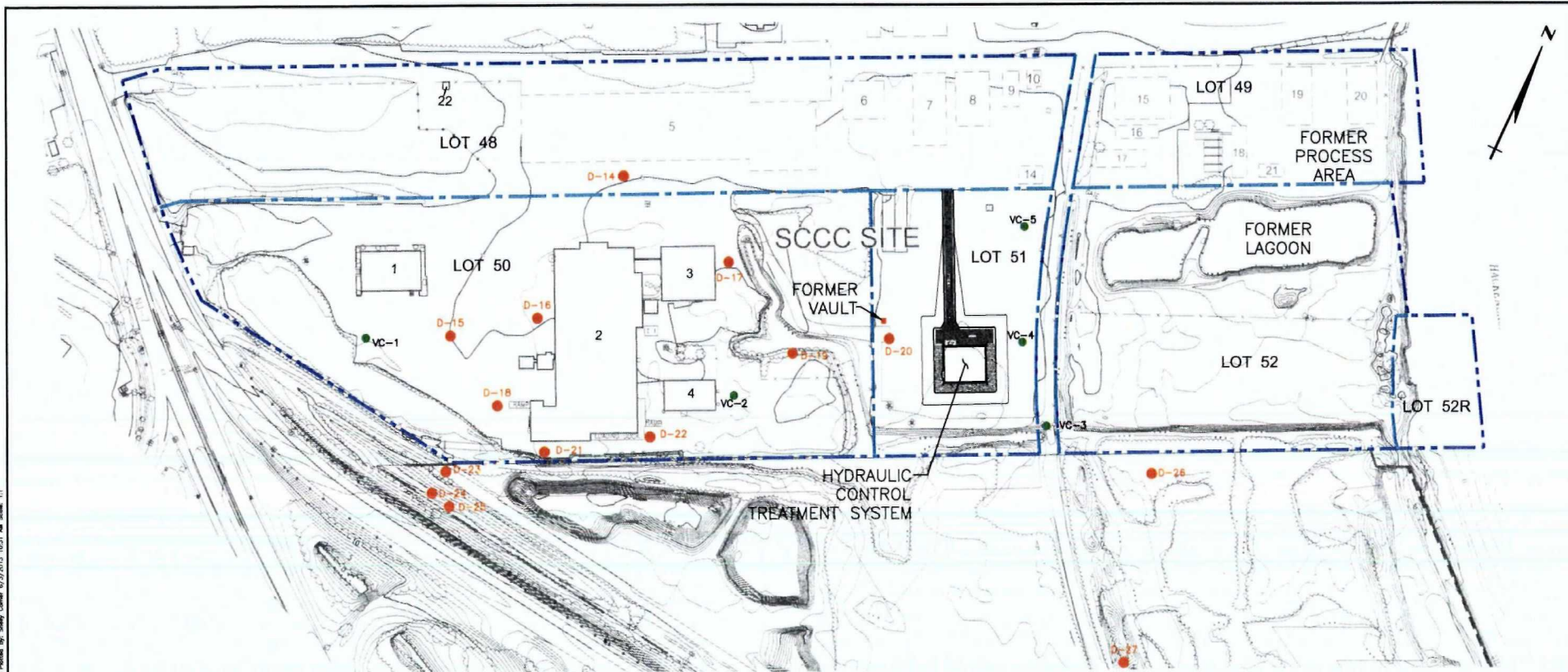


James S. Zubrow
Project Manager

cc: Jay Nickerson – NJDEP
Mitch Brouman – Beazer
Enrique Castro – Tierra (on behalf of Occidental)
Nelson Olavarria- Cooper
John McTigue – Isosceles (on behalf of Apogent)

Attachment A

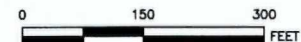
Figure 5-1



SITE LOCATION

LEGEND

- | | | | |
|--|--|--|--------------------------------------|
| | PROPERTY BOUNDARY | | EXISTING ACCESS ROAD |
| | LOT BOUNDARY | | EXISTING FENCE |
| | EXISTING GROUND SURFACE ELEVATION CONTOURS | | EXISTING STRUCTURES |
| | EXISTING STREAM, POND AND RIVER BANK | | FORMER STRUCTURE |
| | EXISTING VEGETATION | | EXISTING UTILITY POLES |
| | | | PROPOSED DNAPL DELINEATION BORINGS |
| | | | PROPOSED VARVED CLAY SAMPLE LOCATION |



COOPERATING PARTIES GROUP

| | | |
|-----------------|----------------|---------------------------------------|
| DRWING: SDC | DATE: 03/15/13 | KEY ENVIRONMENTAL INCORPORATED |
| CHKD: RJA | DATE: 03/15/13 | |
| APPD: JRE | DATE: 03/15/13 | |
| SCALE: AS SHOWN | | |

DRAFT REMEDIAL INVESTIGATION/
FOCUSED FEASIBILITY STUDY WORK PLAN
STANDARD CHLORINE CHEMICAL CO., INC. SITE
KEARNY, HUDSON COUNTY, NEW JERSEY

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CHRYSLER, PA 18104

PROPOSED DELINEATION
BORING LOCATIONS

PROJECT NO: 3013-14
FIGURE 5-1

| REV | DATE | DESCRIPTION | APPD |
|-----|------|-------------|------|
| | | | |
| | | | |
| | | | |

REFERENCE:

Attachment B

Table 5-1

TABLE 5-1
SOIL SAMPLING AND ANALYSIS SUMMARY
SCCC SITE REMEDIAL INVESTIGATION
KEARNY, NEW JERSEY

| Matrix Sample Summary | | | QA Sample Frequency ⁽¹⁾ | | | Analytical Requirements Summary | | | | |
|-------------------------------------|--------------------------------------|----------------------|------------------------------------|----------------|---------|---------------------------------|------------------|---|---|---|
| Analytical Parameter ⁽²⁾ | Sample Matrix | No. of Samples | Field Duplicates | Rinsate Blanks | MS/MSDs | Method Reference ⁽³⁾ | Bottle Type | Required Sample Volume ⁽⁴⁾ | Preservation | Holding Time |
| ORGANICS | | | | | | | | | | |
| TCL VOCs | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | 1 | 1 | SW846 5035A SW846 8260B | Glass | Encore TM (3) or TerraCor Kits | 1 x 5 ml methanol; 2 x 5 ml sodium bisulfate; 1 x 5 ml water. | 14 days from collection if field preserved. Preservation within 48 hours if lab preserved. |
| TCL VOCs | Subsurface Soil VC-1, VC-3-VC-5 | 4+4 ⁽⁶⁾ | 1 | 1 | 1 | SW846 5035A SW846 8260B | Glass | Encore TM (3) or TerraCor Kits | 1 x 5 ml methanol; 2 x 5 ml sodium bisulfate; 1 x 5 ml water. | 14 days from collection if field preserved. Preservation within 48 hours if lab preserved. |
| TCL VOCs | Subsurface Soil D-14 - D-27, VC-2 | 30+15 ⁽⁷⁾ | 2 | 2 | 2 | SW846 5035A SW846 8260B | Glass | Encore TM (3) or TerraCor Kits | 1 x 5 ml methanol; 2 x 5 ml sodium bisulfate; 1 x 5 ml water. | 14 days from collection if field preserved. Preservation within 48 hours if lab preserved. |
| TCL SVOCs | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | 1 | 1 | SW846 8270C | Glass | 100 grams | 4°C | 7 days to extraction/40 days to analysis. |
| TCL SVOCs | Subsurface Soil VC-1, VC-3-VC-5 | 4+4 ⁽⁶⁾ | 1 | 1 | 1 | SW846 8270C | Glass | 100 grams | 4°C | 7 days to extraction/40 days to analysis. |
| TCL SVOCs | Subsurface Soil D-14 - D-27, VC-2 | 30+15 ⁽⁷⁾ | 2 | 2 | 2 | SW846 8270C | Glass | 100 grams | 4°C | 7 days to extraction/40 days to analysis. |
| TCL PCBs | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | 1 | 1 | SW846 8082 | Glass | 4 ounces | 4°C | 7 days to extraction/40 days to analysis. |
| TCL PCBs | Subsurface Soil D-14 - D-27 | TBD ⁽⁸⁾ | -- | -- | -- | SW846 8082 | Glass | 4 ounces | 4°C | 7 days to extraction/40 days to analysis. |
| PCDD/PCDF | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | 1 | 1 | SW846 8290 | 4-oz glass | 25 mg | 4°C | 1 year |
| PCDD/PCDF | Subsurface Soil D-14 - D-27 | TBD ⁽⁸⁾ | -- | -- | -- | SW846 8290 | 4-oz glass | 25 mg | 4°C | 1 year |
| INORGANICS | | | | | | | | | | |
| TAL Metals (includes total Cr) | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | -- | -- | SW846 6000 and 7000 series | Glass | 100 grams | 4°C | 28 days for Hg; 6 months for other metals |
| TAL Metals (includes total Cr) | Subsurface Soil VC-1 - VC-5 | 5+5 ⁽⁶⁾ | 1 | -- | -- | SW846 6000 and 7000 series | Glass | 100 grams | 4°C | 28 days for Hg; 6 months for other metals |
| Hexavalent Chromium | Surface Soil D-14 - D-22 | g ⁽⁵⁾ | 1 | -- | -- | SW846 7199 | Plastic or glass | 100 grams | 4°C | 28 days |
| Hexavalent Chromium | Subsurface Soil VC-1 - VC-5 | 5+5 ⁽⁶⁾ | 1 | -- | -- | SW846 7199 | Plastic or glass | 100 grams | 4°C | 28 days |
| INDICATOR PARAMETERS | | | | | | | | | | |
| Hydronium Ion (pH) | Subsurface Soil VC-1- VC-5 | 5+5 ⁽⁶⁾ | -- | -- | -- | SW846 9045C | Glass | 4 ounces | 4°C | As soon as possible after sample receipt |
| Oxidation-Reduction Potential | Subsurface Soil VC-1- VC-5 | 5+5 ⁽⁶⁾ | -- | -- | -- | ASTM D1498 | Glass | 4 ounces | 4°C | As soon as possible after sample receipt |

- Quality assurance samples to be obtained at a frequency of 1 per 20 samples with the exception of equipment blanks (rinsate samples). Rinsate samples to be collected at a frequency of 1 per 10 samples.
- Abbreviations for analytical parameters are as follows:

| | |
|----------------------------|--|
| TCL - Target Compound List | VOCs - Volatile Organic Compounds (including all three trichlorobenzene isomers) |
| TAL - Target Analyte List | SVOCs - Semivolatile Organic Compounds |
| | PCBs - Polychlorinated Biphenyls as Aroclors |
| | PCDD/PCDF - Polychlorinated-dibenzo-p-dioxins and Polychlorinated-dibenzo-p-furans |
- Abbreviations for analytical methods are as follows:

| |
|---|
| SW846 - Environmental Protection Agency methods per <i>Test Methods for Evaluating Solid Waste - Physical/Chemical Methods - SW846 (3rd Ed.)</i> (as revised and updated) |
| ASTM - American Society for Testing and Materials. |
- Precleaned and prepreserved sample bottles to be provided by the laboratory. Sample volumes to be minimized as possible based on minimum laboratory volume requirements.
- Surface soil samples will not be obtained on the adjacent Seaboard site given that processed dredge material has been placed.
- Samples for varved clay investigation consist of a sample from the upper horizon of the varved clay (5 samples total) and 5 additional samples obtained approximately 5 feet below the initial samples (to be held in the laboratory for analysis if needed).
- Samples for DNAPL investigation consist of a sample from DNAPL impacted zone (or base of deep sand if no impacts), from upper horizon of varved clay (2x14 = 28 samples total) and 14 additional samples obtained approximately 5 feet below the initial varved clay sample (to be held in the laboratory for analysis if needed). One sample of DNAPL-impacted material above the meadow mat will be collected if present.
- TBD - To Be Determined - Up to 10 Samples Exhibiting Evidence of DNAPL Presence will be submitted for analysis of PCBs and PCDD/PCDF.